

ABSTRACT

A direct current to direct current voltage converter (DC-DC converter) in accordance with the invention comprises a transformer coupled with a voltage source and a self-starting oscillator that includes a secondary winding of the transformer, a capacitor; and a first switch coupled to conduct current from the DC source via a primary winding of the transformer. The first switch is a normally closed switch. The DC-DC converter also comprises a second switch coupled to conduct current in a parallel path with the first switch, the second switch being a normally open switch having a lower saturation resistance than the first switch.